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STATE OF MONTANA

# Tenth Annual Report

OF THE

## Industrial Accident Board

For the Twelve Months Ending June 30th

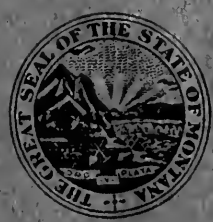
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SAFETY



FIRST

### Workmen's Compensation Act

In Effect July 1st, 1915, as to  
Compensation Provisions

#### MEMBERS OF THE BOARD

JEROME G. LOCKE, Chairman      GEO. P. PORTER, State Auditor  
A. H. BOWMAN, Commissioner of Labor

#### BUREAUS AND BUREAU HEADS

Bureau of Claims.....	W. B. McLaughlin.....	Secretary of Board
Bureau of Accounts.....	T. O. Patrick.....	Chief Accountant
Bureau of Safety.....	Duncan McRae.....	Clerk of Bureau
Bureau of Rehabilitation.....	Leif Fredericks.....	Rehabilitation Agent

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LETTER OF TRANSMITTAL.

Helena, Montana,

September 15, 1925.

To His Excellency, J. E. Erickson,

Governor of the State of Montana.

Sir:

Pursuant to Section 2969, Revised Codes Montana, 1921, we have the honor to transmit herewith our Tenth Annual Report, covering the administration of the Workmen's Compensation Act, Safety Inspection Laws, Boiler Inspection Laws, Stationary Engineers' License Laws, Quartz Mine Inspection Laws, Coal Mine Inspection Laws, Alien and Illiterate Employees' Act, and the law pertaining to Industrial Rehabilitation, by the Industrial Accident Board for the twelve months ending June 30th, 1925. For the reason set forth in the Foreword, the report for the year is brief.

Respectfully submitted,

INDUSTRIAL ACCIDENT BOARD.

JEROME G. LOCKE, Chairman,

GEORGE P. PORTER,

A. H. BOWMAN.

# REPORT OF

## The Industrial Accident Board of the State of Montana

### FOREWORD

The Compensation Act provides that the Board shall, not later than the first day of October of each year, make a report to the Governor covering the entire operations and proceedings of the department for the preceding fiscal year, with such suggestions or recommendations as it may deem of value for public information, and that a reasonable number of copies of such report shall be printed for general distribution.

Heretofore, the Board has printed 4000 copies of its report each year and has sent a copy to each employer under the Act, as well as to attorneys, doctors, other boards, and those who are directly interested in the activity of the department. Due to the fact that the Board now has an insufficient appropriation with which to perform the activities that are laid upon it by law, it is necessary to economize to the last possible degree. The Board believes that the money required for the printing and mailing of 4000 copies of an annual report can be better applied to carrying out activities that are more essential to an efficient conduct of the office. Only 500 copies of the report will therefore be published this year. These will be held for distribution to those who call for them.

Although the annual report has been very much condensed each year for the past four years, it will, in the interest of economy, be further condensed this year. This can well be done, because the legislature will not meet until after another report has been prepared, and there appears to be no particular reason for going extensively into the operation of the Compensation Act or for the making of recommendations at this time. The report, therefore, contains only the statistical information that must be preserved for ready reference at all times and that, it is believed is of primary interest to those who are concerned with the activities of the department.

### BUREAU OF CLAIMS

During the fiscal year ending June 30, 1925, 5,816 accidents were handled and reported. This is a slight increase over the number handled during the preceding year and is about 300 more than the annual average for the ten years since the Compensation Act became effective. The total amount paid in compensation was \$584,837.81. This is about \$63,000.00 more than was disbursed during the preceding year; accounted for largely by the fact that the last legislature increased the liberality of the Act approximately twenty-five per cent, which increase became effective March 10, 1925.

A condensed statement of the number of cases under each of the three plans is given herein for the fiscal year ending June 30, 1925. This table gives at a glance the total volume of business transacted through the Bureau of Claims during the fiscal year and shows the classifications under which the several cases are segregated. The second table gives identical data for the ten-year period during which the compensation law has been effective.

## STATISTICAL STATEMENT FOR YEAR ENDING JUNE 30, 1925

	Plan 1	Plan 2	Plan 3	All Plans
Number Employers under Act June 30, 1925	68	1,254	1,624	2,946
Number Employees under Act June 30, 1925	24,742	13,538	16,233	54,513
Number Fatal Accidents	55	9	15	79
Number Permanent Total Disability	0	0	0	0
Number Permanent Partial Disability	38	11	23	72
Number Temporary Disability over 14 days	1,049	233	489	1,771
Number Temporary Disability less than 14 days	2,138	1,004	752	3,894
Number Total Accidents	3,280	1,257	1,279	5,816
Disbursed for Funeral Expense	\$ 6,396.26	\$ 1,250.00	\$ 2,200.00	\$ 9,836.26
Disbursed for Medical Expense	6,229.63	2,453.30	21,506.31	50,389.27
Disbursed for Fatal Accidents	12,558.13	9,402.60	35,405.88	167,406.64
Disbursed for Permanent Total Disability	5,070.45	9,363.72	16,739.65	31,123.82
Disbursed for Permanent Partial Disability	4,287.01	6,909.89	43,109.09	92,915.99
Disbursed for Temporary Total Disability	146,985.12	22,720.99	63,359.72	233,065.83
Total Compensation Payments	\$330,126.63	\$ 72,300.50	\$182,410.68	\$584,837.81
Lump Sum Payments, Fatal cases	\$170,988.05	\$ 7,114.00	\$ 15,301.65	\$193,403.70
Lump Sum Payments, Non-fatal cases	107,933.01	31,661.41	77,369.25	217,003.67

## STATISTICAL STATEMENT FOR TEN YEAR PERIOD ENDING JUNE 30, 1925

	Plan 1	Plan 2	Plan 3	All Plans
Number Fatal Accidents	836	130	197	1,163
Number Permanent Total Disability	16	6	11	32
Number Permanent Partial Disability	624	231	260	1,115
Number Temporary Disability over 14 days	8,177	2,831	3,769	14,777
Number Temporary Disability less than 14 days	23,848	9,604	4,754	38,206
Number Total Accidents	33,501	12,802	8,991	55,294
Disbursed for Funeral Expense	\$ 62,735.21	\$ 8,226.50	\$ 18,179.25	\$ 89,140.96
Disbursed for Medical Expense	38,074.27	139,775.73	134,966.20	312,816.20
Disbursed for Fatal Accidents	1,533,264.78	182,713.57	310,101.27	2,026,079.62
Disbursed for Permanent Total Disability	67,723.88	24,565.10	56,048.65	148,337.63
Disbursed for Permanent Partial Disability	329,502.17	83,503.92	236,450.62	649,456.71
Disbursed for Temporary Total Disability	943,022.82	233,594.56	424,254.62	1,600,872.00
Total Compensation Payments	\$2,074,323.13	\$ 672,379.38	\$1,180,000.61	\$4,826,703.12
Lump Sum Payments, Fatal cases	\$1,436,914.95	\$ 100,759.18	\$ 344,142.54	\$1,881,816.67
Lump Sum Payments, Non-fatal cases	378,523.23	99,034.68	267,446.21	745,004.12

A comparative record of accidents for the ten years during which the law has been effective is given in the following tables:

### COMPARATIVE ACCIDENT RECORD FOR TEN YEARS

	Average 1st 5 yrs.	6th yr.	7th yr.	8th yr.	9th yr.	10th yr.
Fatal Accidents .....	83	51	81	87	79	79
Totally Disabled .....	156.4	3	0	1	0	0
Partially Disabled .....	4.4	3	6	6	7	7
Paid Disability Compensation .....	139.6	124	76	76	70	72
Return to Work in 14 Days .....	1,634.8	1,299	1,059	1,493	1,778	1,771
	4,331.8	2,349	2,179	3,473	3,853	3,894
Total Accidents .....	6,267.0	3,858	3,368	5,129	5,789	5,816

### COMPARATIVE ACCIDENT PERCENTAGE FOR TEN YEARS

	Average 1st 5 yrs.	6th yr.	7th yr.	8th yr.	9th yr.	10th yr.
No. Employers under Act .....	1,728	2,520	2,557	2,696	2,811	2,946
No. Employees under Act .....	70,000	53,600	53,700	53,900	53,200	54,513
Per Cent Injured .....	8.80	7.00	6.00	9.50	10.88	10.86
Per Cent Compensable .....	2.33	2.81	2.20	2.87	3.30	3.53

*Economic Loss Due to Accidents*

From July 1, 1915, to June 30, 1923, a period of eight years, the Board tabulated as a part of its statistical data all time and wages lost by workmen as a result of industrial accidents under the Act. For the last two fiscal years, due to curtailment of appropriation and inability to pay for the necessary clerical help, the detailed tabulation of time and wages lost has been discontinued. An estimate, however, probably ninety-five to ninety-six per cent accurate, has been prepared.

Since it is not possible to compute the time or wages lost in total disability and death cases, an arbitrary value of \$6,000.00 each has been assigned to these. This is the value that the United States government puts upon a soldier in the U. S. Army.

When the amount paid out by employers in compensation, medical benefits, burial fees, etc., is balanced against the loss of wages suffered by injured workmen, there is a showing that prior to the liberalization of the Compensation Act by the last legislature (effective March 10, 1925) approximately 70% of the economic loss was borne by the workmen and 30% by the industries. In other words, there was returned to the workmen in benefits of one kind or another 30% of the amount he lost in wages plus the amount he himself paid in hospital dues.

By the last legislative session the Act was amended in several particulars to bring about an average increase in benefits of approximately 25%. It therefore follows that as the Act is now drawn approximately 60% of the economic loss is borne by the workmen and 40% by the industries.

This still leaves the Montana Act considerably less liberal on the whole than the average of the acts in the several surrounding states. As a matter of decent justice to the workers of the State, its liberality should be increased another 25% which would bring it up on a par with the acts in our neighboring states, and result in about a fifty-fifty distribution of economic loss.

*Medical Costs*

Prior to March 10, 1925, the maximum amount of benefit provided for medical, surgical and hospital service was \$100.00, payable for service rendered during the first fourteen days following injury only. This amount was entirely inadequate. It was not only unjust, but resulted in much complaint on the part of workmen and in a great deal of criticism from physicians and surgeons, who were often obliged to provide the cost of treatment out of their own pockets. By amendment at the last legislative session, the maximum amount that may be spent for medical, surgical and hospital service was increased to \$500.00, with a provision that such service during the first six months following injury only may be defrayed. The amendment works out, except in very rare cases, with exact justice and has eliminated much of the complaint heretofore lodged against the Act. The tendency has, of course, been to materially increase the amount paid out to doctors and surgeons.

The following table shows the amount of expenditure for medical, surgical and hospital service under Plan Three for each of the ten years that the Act has been effective and the average cost per case upon which payment has been made. The increase in medical benefit did not become effective until March 10, 1925, and, since the following table is for cases up to June 30, 1925, the effect of the increase, as reflected in the amount paid per case, does not show here as it will do in another year:



Fiscal Year	Bills Paid	Total Expenditures	Average per case
1915-1916	63	\$ 1,415.00	\$22.46
1916-1917	195	3,886.55	19.93
1917-1918	293	6,999.35	23.88
1918-1919	234	5,894.85	25.19
1919-1920	558	12,052.40	21.60
1920-1921	729	17,676.75	24.25
1921-1922	709	21,460.62	30.27
1922-1923	722	23,163.30	32.08
1923-1924	757	20,911.04	27.62
1924-1925	739	21,506.34	29.10

### *Compensation Benefits*

By amendment (effective March 10, 1925) the last legislature increased the maximum weekly compensation rate from \$12.50 to \$15.00, increased the amount of medical benefit from a maximum of \$100.00 during the first two weeks following injury to a maximum of \$500.00 during the first six months following injury, raised the age of children who may qualify as beneficiaries and of brothers and sisters who may qualify as dependents from sixteen to eighteen years, included for coverage public officials who are engaged in hazardous occupations, and made the Act elective as to farmers and those engaged in agricultural pursuits.

The sections of the old law providing that major and minor dependents (fathers, mothers, brothers and sisters) be paid the maximum amount of compensation if dependent to any extent was amended to provide that such dependents be paid compensation to the extent of dependency within the maximum weekly payment provided by the Act. This amendment, while in some cases decreasing the amount of benefit payable, is a great deal more just to the employer than the original law.

Although the maximum weekly benefit was increased from \$12.50 to \$15.00 per week, this does not mean that there was such an increase for all workmen under the Act. The Act still provides, as it did heretofore, that not to exceed 50% of the weekly wages at the time of injury may be paid as a compensation benefit. Because of this provision those who draw wages of \$25.00 per week or less get no increase as a result of the amendments that were made. As a matter of fact, the workmen who are paid the smallest wages are the ones most in need of an increase in compensation. It is these who have nothing put by with which to help themselves in the event they suffer injury resulting in disability or death. To spread the benefit due to an increased maximum compensation rate, the percentage of wages payable as compensation should be increased from fifty to sixty. As a matter of fact, most of the states provide 66 2/3% of the wages as a compensation benefit. The average of all the states is above 60%. The Montana Act should be further amended to provide this increase in benefit to more poorly paid workmen.

The waiting period under the Montana Act is two weeks. Under a great many acts in other states it is seven days. The average for all the states is nine days. It should be decreased to one week in Montana.

If these suggested changes were made and the maximum benefit increased to \$18.00, the Montana Act would then pay about the same benefit as is paid by the average of the acts in the states surrounding and the economic loss due to industry would be about equally divided between the workman and the employer.

The law designates the exact payment for cases of permanent total disability and for death cases, so that there is no yearly variation in the average amount paid on claims within these two classes. The following table shows the average that has been paid in compensation for each

case where the disability is temporary total or permanent partial for each of the past ten years under Plan Three.

Fiscal Year	Number Compensation except Permanent Total and Fatal	Total Compensation Paid	Average per case
1915-1916	173	\$ 4,888.35	\$28.26
1916-1917	507	16,032.16	31.62
1917-1918	653	30,552.34	46.79
1918-1919	624	45,682.05	73.21
1919-1920	978	68,575.22	*70.12
1920-1921	1,032	94,394.57	91.47
1921-1922	948	92,710.50	97.80
1922-1923	1,206	105,155.45	86.37
1923-1924	1,398	96,245.89	68.85
1924-1925	1,264	106,468.81	84.23

\*Weekly compensation rate increased from \$10.00 to \$12.50 on March 4, 1919, and from \$12.50 to \$15.00 on March 10, 1925.

### *Vocational Disease*

Vocational disease may be defined as any disease that results from the employment in which a workman is engaged. In some sections of the United States, particularly where there are tanneries and extensive manufacturing concerns, in which workmen are exposed to chemicals and the fumes from these, there are many kinds of occupational or vocational diseases. In Montana there is found only three or four of the several forms of this disease. Coal miners are subject to silicosis or coal miner's consumption to some extent, but it rarely attains sufficient severity to render a man unfit for work or hasten his death. It is due to the constant breathing of coal dust. In the cement plants at Trident and near Lewistown there is a rare case of cement poisoning. There have been but few of these and they have not been severe. The smelters, where workmen are exposed to the fumes of lead and arsenic, furnish an occasional case of either lead poisoning or arsenical poisoning. These are not numerous. The one serious vocational disease with which the State is affected is miner's consumption or silicosis developed in the deep hard rock mines.

Silicosis or miner's consumption results from more or less constant breathing of the very sharp edge particles of quartz dust created either by dry drilling or shoveling and handling of ore. These fine particles are taken into the cavities of the workman's lungs. They lodge there and irritate the delicate membranes. Nature seeks to remedy this irritation so it seals the particles of dust in scar tissue. This takes up a little of the air space in the lung cavity. Other particles of dust are then deposited, other scar tissue is formed and the process is constantly repeated until the lung cavities are entirely filled with quartz dust embedded in scar tissue. As a result, the workman gradually but surely has the air capacity in his lungs cut down until a point is reached where his general physical condition becomes weakened and he is then an almost certain victim of quick consumption, pneumonia, bronchial trouble, or some more rapidly developing disease that ends his life.

The extent of silicosis in the deep hard rock mines of Montana is a great deal larger than the public generally realizes and the toll of death and disability resulting therefrom much greater than is commonly known. The best records obtainable indicate that fully 40% of the miners in Silver Bow County are affected with it and that a half of this number, or twenty per cent of the total, have the disease in such advance stages that they are past medical help. The disease is preventable by the simple expedient of eliminating dust. This may be done by using only water drills and by sufficient sprinkling of ore so that dust is not created in its handling.

The matter of silicosis is vitally important, not alone to the metal miners who are victims of the disease and their dependent families, but

to the general taxpayers of Montana. The records of the State Tuberculosis Sanitarium at Galen show that during the twelve years since the foundation of that institution, 1471 persons have been confined as patients. Fifty-one per cent of the total number of confinements came from Silver Bow County. Forty-three per cent of the patients have been hard rock miners. Thirty-nine per cent of the cases are the result of silicosis contracted in the mines. Of all the deaths that have occurred there—501 in number—57% were attributable to silicosis.

The average cost of maintaining a patient at Galen is about \$2.20 per day. The county from which the patient is committed contributes \$1.00 toward this cost and the balance is made up by appropriation out of the General Fund of the State. In the twelve years for which records are available, the cost of silicosis patients alone has been \$100,089.00 to the counties and \$144,188.00 to the State—a total of approximately a quarter of a million dollars. These figures take no account of the thousands of cases of silicosis that have not been committed to or treated at Galen.

The contraction of silicosis is just as much a hazard of the mining industry as are the accidents that occur in that industry. It results in a greater amount of disability and a larger loss of life than occurs through the industrial accidents. There is no moral reason why the industry should not be held accountable for this condition nor why vocational disease should not be included in the Montana Compensation Act. To do so would ultimately bring about a vastly improved condition in the hard rock mines because it would result in a larger expenditure for ventilation and the elimination of dust, and result in a decrease in the percentage of silicosis victims.

#### BUREAU OF ACCOUNTS

Due to the inadequacy of appropriations and the fact that it was obliged to pay back into the Treasury, from the appropriation for the fiscal year ending June 30, 1925, \$2,747.85, over-draft incurred during prior years, it was necessary to curtail the Department's activities during the year to a point that was seriously reflected in the quality and amount of service performed.

All inspectors, quartz mine, coal mine and hazardous plant—five in number—were laid off entirely during the months of April and May. This resulted in the saving of about \$3500.00 on appropriation, but it also resulted in the loss of about \$4000.00 in inspection fees, and in the failure to inspect a large number of boilers and hazardous plants that should have been inspected. Steamboat inspection, which the law requires, was entirely dispensed with throughout the year.

There should be four inspectors of boilers and hazardous plants to satisfactorily perform the work that is required by law and that safety demands. The Board was obliged to cut the number of inspectors to three after January first. Coal mine and quartz mine inspectors are required by law to immediately visit the mine were a fatality occurs. These trips were eliminated in order to save expense.

During the latter part of the year 1924, the Board employed a traveling auditor for the purpose of checking up the payrolls of employers. In four months time this auditor returned to the Industrial Accident Fund approximately \$10,000.00 in premiums on unreported payrolls. He had covered about half of the State when it became necessary to dispense with his service because of the shortage of appropriated funds.

Approximately twenty-five per cent of the statistical data kept in the Bureau of Accounts has been eliminated in order to obviate the necessity of employing additional clerical help.

There has been little or no educational work done along the line of safety and failure to keep up such work is reflected in the increased

percentage of accidents. Neither has the Board been in a position to encourage new business. It has accepted such applications as were made for compensation coverage, but has made no particular attempt to extend the working of the Act or to bring a greater number of employees under its protection, for the reason that it had insufficient clerical help to handle the volume of business already before the Department. On the whole the Department has been operated about \$8,000.00 cheaper than it should have been operated if it were to perform all of the duties that the law requires and those duties that employers and workmen have a right to expect from such a department.

The salaries for workers in the Bureau of Industrial Rehabilitation and the money that is actually spent upon trainees comes from a separate appropriation which will be reported upon in detail under "Industrial Rehabilitation." A certain part of the overhead expense of the Bureau of Rehabilitation, such as telephones, telegrams, stationery, printing, etc., is borne by the appropriation for the Industrial Accident Board. The following table gives the cost of operating the department, inclusive of a part of the overhead expense for the Bureau of Rehabilitation, but exclusive of salaries, funds provided to trainees, and other expenditures, from the Industrial Rehabilitation Fund.

Fiscal Year	Cost of Department	Legislative Appropriation	Surplus or Deficiency
1917-1918 .....	\$52,770.15	\$53,800.00	\$1,029.85*
1918-1919 .....	56,477.35	53,800.00	2,677.35**
1919-1920 .....	58,764.61	55,800.00	2,964.61**
1920-1921 .....	61,550.04	55,800.00	5,750.04**
1921-1922 .....	48,853.81	53,146.00	4,292.19*
1922-1923 .....	54,357.30	48,146.00	6,211.30**
1923-1924 .....	54,771.83	54,000.00	771.83**
1924-1925 .....	51,232.84	54,000.00	2,767.16*

\*Surplus.

\*\*Deficiency.

Approximately half the cost of maintaining the department, exclusive of the cost paid from the fund for Industrial Rehabilitation, is earned by the department from inspection fees on boilers and steam machinery, hazardous plants, quartz mines, coal mines, and miscellaneous items. The following table shows the cost of operating the department contrasted with its earnings for each of the past eight years:

Fiscal Year	Total Cost of Department	Income from Inspections	Net Cost of Department
1917-1918 .....	\$52,770.15	\$28,732.75	\$24,037.40
1918-1919 .....	56,477.35	28,944.67	27,532.68
1919-1920 .....	58,764.61	28,011.97	30,752.64
1920-1921 .....	61,550.04	26,460.93	35,089.11
1921-1922 .....	48,853.81	27,214.76	21,639.05
1922-1923 .....	54,357.30	28,498.49	25,858.81
1923-1924 .....	54,771.83	28,273.84	26,497.99
1924-1925 .....	51,232.84	21,403.21	29,839.63

*Board of Coal Mine Examiners*

During the session in January and February, 1923, the legislature made no appropriation for the Board of Coal Mine Examiners for the biennium beginning July 1, 1923, and ending June 30, 1925. As a result the Board was not convened and no examinations were given during the year 1924. The last legislative session appropriated \$500.00 to cover this work during the second year of the biennium and the regular examinations for coal mine superintendents, foremen and fire bosses were held in June of 1925 in the cities of Billings and Great Falls. The total cost of these examinations is itemized as follows:

George N. Griffin, salary and expense .....	\$126.37
Ed. Cunningham, salary and expense .....	172.50
Albert Gately, salary and expense .....	162.04
Miscellaneous expense, stationery, etc. ....	86.74
Total .....	<u>\$547.65</u>
Appropriation .....	500.00
Overdraft .....	<u>\$ 47.65</u>

*Financial Condition of Department*

The following statement shows the financial condition of the Department at the close of the fiscal year. Foot-notes, explaining each item, appear following the statement. While the total cash and invested funds of the Department is \$516,530.96, exclusive of the Administrative Fund derived from inspection fees and appropriated by the Legislature toward the maintenance of the Department, and exclusive of Special Deposits, the known liabilities (the amount it would take to pay out on all compensation cases now pending) is \$193,456.00. Therefore, the fund for the payment of compensation now has a reserve of \$323,074.96 against any great calamity which may occur. The table showing known liabilities is not published because of its length. It was made up by going over each case carefully and estimating the amount of liability in comparison with similar cases that have been settled. Copy of the table is on file in the office of the Board.

## FINANCIAL STATEMENT AS OF JUNE 30, 1925

## ASSETS

Cash Funds:	
Industrial Accident Fund .....	\$ 52,237.44
Industrial Reserve Fund .....	40,956.23
	<u>\$ 93,193.67</u>
Less Outstanding Warrants .....	49,305.26
Net Cash on Hand .....	\$ 43,888.41
Invested Funds:	
Registered Warrants .....	\$ 26,456.36
Industrial Accident Fund .....	216,887.80
Industrial Reserve Fund .....	240,953.76
	<u>484,297.92</u>
Net Invested Funds .....	484,297.92
Total Cash and Invested Funds .....	<u>\$528,186.33</u>
Administrative Fund .....	1,811.23
Trustee Account .....	133,207.30
Suspense Account (to be adjusted) .....	782.89
Administrative Expense .....	<u>51,232.84</u>

## LIABILITIES

Premium Income .....	\$1,591,355.40
Less Compensation Paid .....	<u>1,180,000.61</u>
Net Premium Income .....	411,354.79
Administrative Income .....	53,044.07
Bonds in Trust .....	133,207.30
Special Deposits .....	11,655.37
Transit Account (Deferred Income) .....	56.78
Interest Collected .....	<u>105,902.28</u>
	<u>\$715,220.59</u>

## ASSETS

**Industrial Accident Fund,** shown above as \$52,237.44 cash and \$216,887.80 invested in securities, is made up from all assessments on payroll and interest collected. All payments for compensation and refunds are made directly from this fund. The main fund consists of some 140 sub industry funds. The cash on hand is carried as a deposit with the State Treasurer who pays interest thereon at the rate of 2½ per cent.

**Industrial Reserve Fund,** shown above as \$40,956.23 cash and \$240,953.76 invested in securities, is made up of a certain per cent of premiums collected into the Industrial Accident Funds and then transferred to the Reserve Fund to take care of the accrued liabilities on accident cases upon which compensation is still payable. All interest collections from the State Treasurer and from bonds and warrants held for investment is first credited to the Industrial Accident Fund, but periodically transferred to the Reserve Fund. This Reserve Fund is considerably more than sufficient to meet all the accrued liabilities.

**Less Outstanding Warrants:** This represents the total amount of warrants issued by the Board to injured employees, which have not been redeemed by the State Treasurer at the time of statement and consequently must be deducted from the gross cash funds to show the net amount of cash on hand.

**Registered Warrants:** These are warrants taken in payment of premiums from counties, cities and school districts and are held by the Board until called and redeemed by the various treasurers. They all pay six per cent interest.

**Administrative Fund:** This fund is made up of collections from the Bureau of Safety and comprises inspection fees for hazardous plants, boilers, quartz and coal mines. A portion of the expense of administering the Board is paid from this fund by legislative appropriation.

**Trustee Account:** This account is carried for the purpose of showing the aggregate amount of securities deposited by employers and held by the Board as a guarantee that they will make compensation payment when operating under Plan One of the Act.

**Suspense Account:** This account is the total of funds which were in process of collection and tied up in closed banks and of checks which were credited and later refunded due to the closure of banks while the checks were in process of collection.

**Administrative Expense:** This is the amount expended for the maintenance and operation of the department from the beginning of the fiscal year.

## LIABILITIES

**Premium Income:** This account shows the net amount of premium income for the ten year period. There is included in this statement only the premiums that have been collected. Assessments are not credited on the books until collection has been made.

**Less Compensation Paid:** This is the amount of compensation that has been paid out in the ten year period.

**Net Premium Income** is the net balance on hand after deducting the compensation paid from the total premium income.

**Administrative Income** is the gross amount collected from inspection fees of all kinds.

**Bonds in Trust:** The same as Trustee Account under assets.

**Special Deposits:** These are deposits required by the Board from certain employers operating under Plan Three to guarantee the payment of any premiums that may become due from them.

**Transit Account (Deferred Income):** Checks held for payment.

**Interest Collected:** This is the total amount of interest collected on investments less accrued interest paid on the same at the time of purchase.

*Investments*

It is the policy of the Board to keep about \$50,000.00 in cash on hand as a fund to meet current compensation payments and to take care of the liabilities that are accruing daily. The balance of the Industrial Accident Fund and the Industrial Reserve Fund is invested in securities returning interest rates from four to eight per cent. These securities are purchased from many different sources and at the best prices that can be obtained. It is the policy of the Board to invest in securities that will return the maximum rate of interest consistent with safety of the investment. At times it has been a difficult matter to keep the surplus funds safely and profitably invested. At the present time there is a total of approximately \$484,000.00 invested in various securities, consisting of bonds and warrants. There is approximately \$5,000.00 Federal securities, \$10,000.00 State securities, \$365,000.00 county, city and school district securities, \$102,000.00 special improvement district bonds, and \$2,000.00 irrigation district bonds and warrants.

*Addition to Cash and Invested Funds on Hand*

The following table shows the income from premiums, the income from interest and discounts, the compensation paid, and the growth of the cash and invested funds on hand during the past ten years:

Fiscal Year	Premium Income	Int and Dis. Income	Total Income	Compensation Paid	Added to Cash and Invested Funds
1915-1916	\$ 29,058.86	\$.....	\$ 29,058.86	\$ 6,303.35	\$22,755.51
1916-1917	43,343.84	412.02	43,755.86	34,587.17	9,168.69
1917-1918	132,277.58	1,066.03	133,343.61	55,236.29	78,107.32
1918-1919	181,709.35	2,124.27	183,833.62	68,708.45	115,125.17
1919-1920	225,507.86	7,702.38	233,210.24	135,002.94	98,207.30
1920-1921	202,981.07	13,146.03	216,127.10	167,694.40	48,432.70
1921-1922	186,383.56	16,775.82	203,159.38	174,516.93	28,642.45
1922-1923	188,916.19	19,012.53	207,928.72	192,583.46	15,345.26
1923-1924	147,396.04	23,517.75	170,913.79	162,956.94	7,956.85
1924-1925	253,054.94	22,145.45	275,200.39	182,410.68	92,789.71
Total	\$1,590,629.29	\$105,902.28	\$1,696,531.57	\$1,180,000.61	\$516,530.96

*Losses in Collections*

Earned premiums are not carried to the books or listed as assets until collection is made. Due to the system that was followed, of making arbitrary assessments and then an adjustment of the account at the end of the calendar year, it has not heretofore been possible to accurately compute the amount of earned but uncollected premium at the end of the fiscal year.

In December of 1924 the Attorney General rendered an opinion greatly changing the interpretation that had been put on the sections of the law relative to the collection of premiums. This opinion has permitted a revision of the system of billing and collecting, so that premiums are now collected at the end of each two-month period. By another year it will be possible to compute the exact amount of earned but uncollected premium at the end of the fiscal year.

Under the new system each employer who makes application for compensation coverage is required to make a deposit of the amount of premium on three months estimated payroll. He is billed for the earned premium at the end of each two-month period. If payment is not made within thirty days the account is cancelled and the deposit applied to premium payment. Under this system very little loss in premium collection will occur in the future. The only possibility of loss will be in those cases where the amount of deposit is less than the actual premium earned. Employers who were under the law at the time of the change in system have not been required to make a deposit. There may, of course, be some loss on these employers, in cases where they go into bankruptcy or other form of liquidation, and the Board is unable to protect its account. Gradually, as time goes on, the percentage of employers who have deposits as a guarantee of premium payment will constantly increase and the losses in collection will become smaller and smaller.

The following table shows the losses that have been sustained in the collection of premium assessments under Plan Three by fiscal years. All accounts now past due for the last fiscal year are carried in a "Suspense File." The amount shows in the table. For many of these accounts the Board has judgments; court action is pending on others. They will be recovered in part.

Fiscal Year	Collections	Losses
July 1, 1915, to June 30, 1920 (5 yrs).....	\$ 611,897.49	\$ 2,452.63
1920-1921 .....	202,981.07	568.29
1921-1922 .....	186,383.56	891.94
1922-1923 .....	188,916.19	257.20
1923-1924 .....	147,396.04	1,501.50
1924-1925 .....	253,054.94	1,004.05
Total.....	\$1,590,629.29	\$ 6,675.61
Suspense File.....		16,421.71
		<b>\$23,097.32</b>

## BUREAU OF SAFETY

The several laws administered by the Board require at least an annual inspection of each quartz mine, boiler and hazardous plant in the state. The coal mining code requires quarterly inspection of coal mines. The records of the Board show that there are 4,650 steam boilers in the state and since it is believed that there is still a considerable number of boilers which have never been located by the inspectors, it is probable that the total number of steam boilers and pieces of steam machinery is close to 5,000. In addition to these boilers, there are approximately 1,000 hazardous plants in the state, inclusive of mines of all kinds. This means that under the provisions of the law, 6,000 inspections should be made annually.

With the limited amount of appropriation it has been physically impossible to make the number of inspections the law requires. Due to shortage of funds three boiler and hazardous plant inspectors were employed for only ten months each during the last fiscal year; one boiler and hazardous plant inspector was employed for six months only. The quartz and coal mine inspectors were each employed for ten months only. Since the Bureau of Safety is more than self-supporting, financially, it was not sound business policy to curtail the work of the Department. This could not be helped, however, in face of the legal requirement that money earned from inspections cannot be spent in prosecution of such work in excess of the amount appropriated by the legislature.

As heretofore stated, no steamboat inspections whatever were made. Mine inspectors were ordered not to make extra trips for the purpose of investigating fatalities, as the law requires. No money was spent by the Department in educational work, or otherwise, along the line of "Safety First." Fortunately many of the larger employers in the state maintain their own safety bureaus and do much valuable and effective work toward the minimizing of accidents. There was one particularly noteworthy development during the year—this in the perfection and distribution of a demountable drill bit known as the Hawkesworth Drill. This improved equipment, which is being adopted by mining companies as fast as they can secure the tool, has already materially lessened the hazard of hard rock mining and will in the future continue to lessen such hazard in proportion to the number of these drills used. Particular reference is made to the Hawkesworth Drill in a following section of this report.

The following table shows the work and accomplishment of the Bureau of Safety for the fiscal year ending June 30, 1925.

Inspector	Months Worked.....	Licenses Issued.....	Boilers Inspected.....	Safety Inspections.....	Cash Collections.....	Salary and Expense.....	Profit + Loss.....
Bondy, J. H.....	10	501	915	49	\$ 7,218.76	\$ 3,705.27	\$ 3,513.49+
Johnson, Floyd.....	10	266	494	16	3,516.50	3,124.26	392.24+
Hartley, J. R.....	10	246	393	48	3,556.79	2,986.22	570.57+
Taylor, John.....	6	100	336	23	3,000.47	2,459.94	540.53+
Maxwell, Wm.....	10	.....	.....	314	1,539.65	3,598.79	2,059.14—
Griffin, George.....	10	.....	.....	296	1,635.25	3,231.73	1,596.48—
Office.....	12	3,059	.....	.....	3,636.50	2,297.00	1,339.50+
	4,172	2,138	746		\$24,103.92	\$21,403.21	\$ 2,700.71+

In addition to the total of \$24,103.92 "Cash Collections" there was \$619.00 of uncollected inspection fees at the end of the year.



*Work and Collections Safety Bureau—Eight Years*

The following table shows the detailed operations of the Bureau of Safety for each of the past eight years:

Fiscal Year	Licenses Issued	Boilers Inspected	Plants Inspected	Fees Collected	Expense	Profit + Loss —
1917-1918.....	4,986	2,358	262	\$28,732.75	\$27,831.15	\$ 901.60+
1918-1919.....	4,698	2,522	209	28,944.67	26,891.20	2,053.47+
1919-1920.....	4,724	2,501	76	28,011.97	27,746.01	265.96+
1920-1921.....	4,564	2,438	111	26,460.93	28,831.33	2,370.40—
1921-1922.....	4,232	2,121	280	27,214.76	25,094.00	2,120.76+
1922-1923.....	4,580	3,463	696	28,498.49	27,298.20	1,200.29+
1923-1924.....	4,530	3,094	754	28,129.89	28,071.63	58.26+
1924-1925.....	4,172	2,138	746	24,103.92	21,403.21	2,700.21+
Average 8 yrs.	4,511	2,579	392	\$27,512.17	\$26,520.84	\$ 866.27+

## THE HAWKESWORTH DRILL

In connection with the trend of modern day efforts to minimize the hazard attendant upon mining, a striking development in this direction is to be recorded for the year 1925 in regard to the handling of drill steel in the mines of Butte. For many years it has been generally recognized that the universal method of handling, sharpening and transporting drill steel in endless cycle and large tonnages from shop to miner underground, and from miner to shop after use, is a wasteful, uneconomic, and hazardous operation. Official records covering the mining districts of Montana bear testimony to the toll of life and limb taken by drill steel falling down shafts and workings in the mines. Scores of fatalities and hundreds of non-fatal accidents during the past twenty years are directly attributable to drill steel. In one instance in Butte six men were killed in one accident by falling drill steel.

Happily this hazard is practically eliminated by a new and simple device now being installed in the mines of Butte, and called the Hawkesworth demountable drill bit. This bit is simply a demountable drilling point made for any type of drill steel. It slips easily upon the machined end of the drill shank or stem, and is readily removable after being dulled. Its use does away with the handling of 90 to 95 per cent, by weight, of the volume of drill steel necessary to operate a mine, and the bits themselves consistently give a very substantially larger footage than any standard type or character of drill steel now in general use. A set of drill shanks of the new type are transported underground to the working place and to all intents become a part of the drill machine, and remain there for indefinite periods of service. The miner takes underground with him a few pounds of the bits or points, which weigh only a few ounces each, and, relieved of the age-old necessity of tramping or carrying on his back quantities of heavy steel into raises, stopes and workings, reaches his working place fresh and untired, to find his set of drill shanks awaiting him. Thus he has always at hand an ample supply of sharp steel in the shape of the bits, and always the right number of changes in shanks, and of the proper length. When dulled the bits are returned to the surface for regrinding.

A common and all too frequent cause of fatal accidents in mines is caused by miners carrying drill steel on their shoulders, and the steel coming in contact with an overhead trolley wire, resulting in electrocution. The new steel eliminates this hazard also.

This department has followed with great interest the development of the demountable bit, and feels that hitherto inescapable hazards to life, limb and property in this important regard are now definitely eliminated. It is unnecessary to point out that developments and advancements of this character are of decided advantage to the morale and well-being of the underground worker, and is also likely to improve the personnel of

the miners generally, due to the popularity of the new steel and the ability of the miner to make better pay with less laborious and dangerous work. This situation also redounds to the decided advantage of the employer as well, as his steel consumption henceforth will be measured in ounces instead of tons, to say nothing of increased efficiency and other benefits.

## COAL MINE INSPECTION

Due to the fact that the Board was obliged to suspend the work of the State Coal Mine Inspector during the months of April and May of the last fiscal year, and to the additional fact that Mr. George N. Griffin, who held the position of inspector up to the end of the fiscal year, was in failing health, no detailed report of his work and activities during the year was filed with the Board.

The Safety Bureau made an effort to obtain the information ordinarily contained in the Coal Mine Inspector's report through the medium of correspondence. This was not wholly successful inasmuch as a number of the mines neglected to return the questionnaires which were sent out or the necessary correspondence relative to their operations. The records in the Bureau of Safety show that there are 143 operating coal mines in the State. Only 43 of these returned questionnaires or otherwise furnished information which was solicited by the Department. It is true that all of the larger mines reported and that most of those who did not report are what are known as "wagon mines," employing from one to three men and often times employing these men only intermittently. The reports which were received and which are tabulated below probably account for ninety per cent of the coal production of the state.

The following tabulation shows the number of men employed in and around the coal mines of Montana, the tons of coal produced by years and certain data relative to the operation of mines for the last fiscal year:

Years	Men Employed	Production in Tons	Value
1901 to 1910 inc.....	2,777 (average)	18,697,641	Not given
1911 to 1920 inc.....	3,930 (average)	34,821,324	\$64,372,502.00
1921 .....	4,300	3,392,031	9,365,230.00
1922 .....	4,431	2,818,654	8,659,192.00
1923 .....	4,097	3,140,837	9,903,625.00
1924 .....	3,035	2,988,779	8,172,150.00
1925 .....	2,496	2,252,899	6,652,009.00

### FISCAL YEAR 1924-1925

Mines reporting .....	43
Machine men employed.....	139
Loaders employed .....	805
Miners employed .....	534
Inside day men employed.....	656
Outside day men employed.....	362
Total number of men employed.....	2,496
Total number of tons of coal produced.....	2,252,899
Value at mines .....	\$6,652,009.00
Tons of coal produced per life lost.....	321,842
Number of men employed per fatal accident.....	356
Number killed per thousand men employed.....	2.80
Number of kegs of powder used.....	40,430
Pounds of dynamite used.....	18,032
Tons of coal mined by machines.....	1,345,191
Tons of coal mined by hand.....	907,708
Per cent of coal mined by hand.....	59.2
Per cent of coal mined by machine.....	40.8
Number of lives lost .....	7
Average days worked during year.....	176

## QUARTZ MINE INSPECTOR'S REPORT

The general matter contained in the annual report of the State Quartz Mine Inspector, to the Industrial Accident Board, is incorporated herein and follows. More detailed matter contained in his report is on file with the Board.

September 20, 1925.

State Industrial Accident Board,  
Helena, Montana.

Gentlemen:

I am herewith submitting my annual report as Quartz Mine Inspector of the State of Montana, for the fiscal year beginning July 1, 1924, and ending June 30, 1925.

The scope of this report is, by direction, limited to a summary of the activities of this bureau, and to a brief review of the general mining conditions which have maintained throughout the state during the period mentioned.

*Mining Activity*

While the activities of many leasers and small operators have had a tendency to increase mineral production during the past year, a greater activity should exist in the opinion of many mining men, owing to the fact that metals have reached and steadily maintain a healthy market price. Capital, however, has been very hesitant in coming forward to assist in development of the many valuable mining properties of unquestioned merit, in which Montana abounds. Strange as it may seem, it has been noted by close and knowing observers that Montana does not receive the support and cooperation of its citizens as a whole in the development of its mineral resources to the extent which its emoluments will justify to the careful investor.

Several new operations are in prospect at the present time, and if current reports prove true, increased activity will soon be noted, more especially among the old silver, lead and zinc producers which have been permitted to lie dormant for many years.

In the Butte district, a steady production has maintained in spite of the difficulty encountered in securing the services of skilled miners so essential to the work.

*Accidents, Serious and Fatal*

I have visited hospitals on many occasions to ascertain from the injured themselves upon whom or upon what existing conditions rested the responsibility of their misfortune. In only a few instances did they hold the operators or conditions responsible for their mishaps.

These specific instances were carefully investigated and the remedial suggestions offered were concurred in and acted upon:

No. of fatal accidents thoroughly investigated.....	51
No. of serious accidents inquired into.....	37
No. of coroner's inquests officially attended.....	31
No. of mines inspected .....	138
No. of mills and smelters inspected.....	14

As in former years, I have made many visits to properties in response to complaints and grievances to which my attention had been called. In some instances the complaints were just, and such betterments consistent to sane and safer mining as were suggested and ordered, were rigidly complied with, not alone to the appreciation of the complainant, but alike to that of the operator.

*Fatal Accidents and How Occurring*

I have always deemed it advisable, when submitting my report, to tabulate the number and manner of fatal accidents in the belief that the disclosure might lead to increased care and precaution in averting such accidents, which report follows:

Falls by timber giving away.....	1
Electrocution by underground trolley wires.....	5
Run over by underground ore trains.....	2
Suffocation in burning shaft.....	2
Burns caused by burning shaft.....	1
Falling ground .....	13
Killed by crane while operating same.....	1
Hemorrhage after coming to surface.....	1
Cage running into sheave.....	2
Caught between ore car and posts.....	2
Hit by motor on level.....	1
By falling skip .....	1
By blasting .....	7
Caught between ore cars on level.....	1
Caught by cage .....	1
Smothered in manway chute .....	1
Falling down slide rock .....	1
Caught in caves .....	4
Overcome by gas in old workings.....	2
By falling timber in mine yard.....	1
By being caught in conveyor belt at smelter.....	1

51

The total fatalities exceeded by six those of the preceding year, by blasting one, falling ground two and suffocation in various ways three. For the fiscal year ending June 30, 1924, there were no fatalities resulting from fire suffocation, burns or caves, and it is to be reasonably assumed that, barring the principal causes of accidents, falling ground, blasting, handling tools, etc., with greater care exercised by the victims themselves, the fatality list should have been greatly reduced.

*Causes of Accidents*

The increased efficiency of the safety inspection system for the prevention of accidents, inaugurated by the Anaconda Copper Minning Company, and the accompanying first aid treatment accorded the unfortunate, have tended very materially to lessen the mining fatalities of the Butte camp, and it is a gratifying fact that many of the other smaller operators throughout the mining districts of the State, impressed with the results obtained, have adopted similar safety systems and treatments.

Following are the causes of a number of the accidents occurring, which contain an impressive lesson in safety first practices for mine workers generally:

- 1 Caught by caving stope.
- 1 Stuck his head over shaft—descending skip hit his head.
- 1 Stood in front of skip pocket while freeing air lift door.
- 1 Surge of ore and water knocked him into shaft.
- 1 Was walking under a manway when a steel fell and struck him on the head. This happened after the man in the manway had told him all was clear.
- 1 Was pushing rock down slide to fill a car, when a slab of ground which he had not seen or examined, fell on him.
- 1 Climbed to the cupola of the compressor room to get a good view into a window across the street, when he came in contact with a high tension wire.
- 1 Pulled an empty car off the cage and stepped back against a timber; the car jammed his abdomen, causing fatal internal injuries.
- 1 Picked into a missed hole and was instantly killed.
- 1 Was picking out for a timber when ground fell on him.
- 1 Was cleaning floors getting ready to replace timber blasted out by previous shift, when ground fell on him.
- 1 Climbed down between bare trolley wires and chute to get out of the way of a blast in the chute, and was electrocuted. Trolley wire was bare, the fault of boss in charge.
- 3 Were killed in a cave in a stope while taking out block of ore under sill.
- 1 Was climbing up to block set of timbers, when slab fell. His foot caught in hole in floor while he was attempting to get out of the way.

- 1 Died of an undetermined cause while pushing an empty car.
- 1 While mucking out for timber was caught in fall of ground.
- 1 Was carrying drill steel on his shoulder and hit the trolley wire.
- 1 Pulled a loaded car towards him, went to step aside to let the car pass, and the car jumped him against a post.
- 2 Were killed in a cage wreck caused by mechanical failure of the hoisting engine, which could not have been foreseen.
- 1 Climbed over a train of loaded cars and stuck his head up into the trolley guard.
- 1 Sat down on motor track to eat his lunch, when motor ran into him.
- 1 Was loading surface lorry car from surface skip pocket, when engineer pulled skip into sheaves. Skip fell back on miner.
- 1 Was laying floors when a rock fell on him.
- 1 Was preparing to replace timber in raise which he had blasted out, slab fell on him.
- 1 Was cleaning loose rock from chute set, when slab fell on him.
- 1 While drilling, ground fell, crushing him over machine.

### *The Use of More Care Urged*

"There are times when all the skill and experience of the most capable miner will not prevent a falling ground accident, but in many instances men are hit by falling ground, through lack of barring down, and if proper care and precaution were taken, this class of accidents could be greatly reduced in number," says the Company's report.

From the Company's report it is further gathered that—

29.28% of all serious injuries are fingers.

24.68% of all serious injuries are toes.

53.96% of all serious injuries are fingers and toes.

### INJURIES OCCURRING IN THE A. C. M. MINES AND SHOPS OF BUTTE, FOR THE FISCAL YEAR ENDING JUNE 30, 1925.

Year	Fatal	Serious	Slight	Lost no Time	Total	Shifts Worked
1924—						
July .....	2	37	120	144	353	175,813.75
August .....	2	36	125	184	341	174,786.50
September .....	6	35	91	179	311	169,759.75
October .....	0	42	158	191	391	193,847.75
November .....	6	36	122	189	353	187,826.75
December .....	6	45	133	217	401	201,308.00
1925—						
January .....	1	62	183	252	498	219,935.25
February .....	1	57	134	232	424	200,452.50
March .....	0	69	119	228	416	216,574.75
April .....	2	60	164	246	472	210,109.00
May .....	2	58	165	222	447	199,692.00
June .....	1	57	169	219	446	197,023.75
	29	588	1683	2453	4853	2,347,069.75

*Recommendations and Notices Served*

Since assuming the duties of my office as Quartz Mining Inspector, it has been my insistent aim and purpose to see that the mining laws of Montana, having special reference to the safeguarding of the life and limb of those engaged in the more or less hazardous occupation of quartz mining, were strictly adhered to. It has been my endeavor to be unfaltering in this duty. Requirements for the betterment of conditions of the employee have been my aim and effort, and with the possible exception of a few operators, I am gratified in the knowledge that all requirements made in that particular have been willingly met and complied with. Following are character and number of the recommendations made:

Regarding timbering and safe lagging.....	10
Grizzlies over chutes.....	14
Warnings pertaining to leaving loose powder around levels.....	6
Mine signal codes on all stations and engine rooms.....	8
Landings in manways—every 30 feet.....	18
Ladders for climbing out of shafts and landings.....	5
Orders against riding on loaded cages or skips.....	4
Safe location for underground powder magazine.....	6
Installation of fans for better ventilation.....	11
Recommendation for better and safer hoisting cables.....	3
Recommendations for escape ways by raises, cross-cuts, etc.....	9
Proper and safer safety dogs on cages.....	3
Filling stopes close for safety.....	7
Housing gearing in mills.....	2
Guard rails around fast power driving belts.....	8
Proper securing of ground by barring or spragging.....	Many
Keeping underground trolleys properly boxed.....	10
Recommendation of battery motors, where possible.....	Many

While there is no mining statute compelling the use of battery motors underground, yet, the A. C. M. Company, the largest operator in the mining industry of the state, has some of its mines fully equipped with underground battery motors, and has in view universally adopting them where conditions will permit.

Other operating companies are installing underground batteries, which in my opinion is a progressive move in mining and will unquestionably result in eliminating the acknowledged hazard of underground trolley wires, the resulting death toll of which has been great in years past.

As is usually the lot of the Mine Inspector, I have been the recipient of an abundant supply of communications from all over the country and of the world from persons seeking information regarding mining properties, mining companies, mining men and mining stocks. Even were I provided with a stenographer, and other office facilities and necessities, it would be quite impossible to give detailed or general information on the varied subjects of inquiry. As a consequence, it has been incumbent upon me to ignore the larger part of this volume of correspondence.

I cannot conscientiously conclude this brief report without an expression of my deep sense of gratitude to your chairman, Mr. Jerome G. Locke, and also Mr. W. B. McLaughlin and Mr. Duncan McRae, in recognition of the uniform courtesies and kindnesses extended to me during the past year in my business and all relations with the Board.

Respectfully submitted,

(Signed) WM. MAXWELL,

State Quartz Mine Inspector.

## INDUSTRIAL REHABILITATION

The Sixty-sixth Federal Congress passed "An Act to provide for the promotion of vocational rehabilitation of persons disabled in industry or otherwise and their return to civil employment." The bill was approved by the President on June 2nd, 1920. The Act made appropriation of \$750,000.00 for the fiscal year ending June 30, 1921, and one million dollars for each of the three following years, under the provision that the sum should be allotted to the states on basis of population and with the added proviso that no state should receive less than \$5,000.00 in any fiscal year.

The money was made available under condition that for each dollar of Federal money expended, at least an equal amount of state money should be expended. The money can only be used within limits that have been laid down by the Federal Board of Vocational Education and on cases which are approved by such Board. The law also provides that in order to secure the benefits of the appropriations, the state shall, "through the legislative authority thereof: (1) accept the provisions of this Act; (2) empower and direct the board designated or created as the State Board for Vocational Education to cooperate with Federal Board for Vocational Education in the administration of the provisions of the Act; (3) provide that a plan of cooperation be formed between the Industrial Accident Board and the State Board of Vocational Education; (4) provide for the supervision and support of the courses of vocational rehabilitation to be provided by the State Board in carrying out the provisions of this Act; and (5) appoint as custodian for said appropriations its state treasurer."

The Seventeenth Legislative Assembly, by passage of an act which was approved on March 5th, 1921, accepted the benefit of the Federal Law and made application for its share of the appropriation made thereunder. The Legislative Act designated the State Board for Vocational Education to cooperate with the Federal Board for Vocational Education in the administration of the work, and provided further that the Industrial Accident Board should cooperate with the State Board in the formulation of a plan of activity. The Legislature appropriated \$10,000.00 for each of the fiscal years ending June 30, 1922 and 1923, for the work. Obedient to the Legislative Act, the work was organized and started at the beginning of the fiscal year 1921-1922. For each of the fiscal years ending June 30, 1924 and 1925, the Eighteenth Legislative Assembly appropriated \$13,500.00 to carry on the state's share of the work.

*Transfer of Bureau*

For the first few months, the work of industrial rehabilitation was under the direct supervision of the State Board of Vocational Education and its personnel was quartered in the office of the Superintendent of Public Instruction. A few months' experience demonstrated that the work of industrial rehabilitation cannot be satisfactorily administered in connection with the work of vocational education. The work is not altogether educational in character and cannot be suitably carried on as one of the activities of the Department of Education. By consent of the State Superintendent of Public Instruction, the Board of Vocational Education and the Industrial Accident Board the activity was moved over to the Industrial Accident Board and became one of the bureaus of this department. Now, while the work of industrial rehabilitation is nominally under the jurisdiction of the Board of Vocational Education, it is, in reality, under the jurisdiction of the Industrial Accident Board. The experience of nearly four years in handling the work has demonstrated the wisdom of the transfer. A large percentage of the cases for rehabilitation grow out of industrial accidents. When the administration of rehabilitation and compensation is carried on in the same department, it is possible to make one activity cooperate with the other to the ad-

vantage of both. Likewise, it is much easier for those concerned with rehabilitation work to find and classify the persons subject to the provisions of the Act where such work can be carried on in conjunction with compensation administration, so that the records of one activity are available to the other.

#### *Rehabilitation Field*

It is difficult to define the extent of the rehabilitation field. No figures are available to show the number of those who are wholly or partially dependent upon charity in some form or other because of vocational handicap. A very large percentage of the persons suffering such handicap have been the victims of accidents, industrial or otherwise. A small percentage have been handicapped as a result of the physical disability following sickness or disease. There are many hundreds of such persons in the State.

The fund for the prosecution of the work is small. The benefits of the Act cannot be extended to any considerable percentage of those who now have vocational handicap. Moreover, the work is still in more or less of an experimental stage. For these reasons there has been established a policy that contemplates the spending of time and money on cases that seem to give the greatest promise for successful results. In other words, the department has attempted to devote its effort and the limited finances available to such cases only as can probably be restored to productive capacity without excessive expenditure.

We believe it may be said that the work has been successful. It is true, of course, that there is failure in some cases. Occasionally an individual is accepted for training and it later develops that he does not have the required mental capacity. In other cases the individual either becomes discouraged or loses his ambition and the time and money that is spent on him is largely wasted. Still other individuals will not follow the vocation for which they take the training. On the whole, however, more than fifty per cent of the cases handled by the department have been rehabilitated to the extent that they have become partially or wholly self-supporting. In view of the fact that only a few hundred dollars at the most is spent on any one case, we think it can be said that from an economic standpoint, the activity of rehabilitation is wholly sound. The monetary value of a workman to society at large is about six thousand dollars. If only four persons were rehabilitated each year, the expenditure that is made would be justified.

#### *Work Accomplished*

The following tabulations gives some idea of the accomplishment of the Bureau since its creation four years ago.

##### CASES REPORTED AND APPLICATIONS RECEIVED

	Prior to 6-30-24	Fiscal Year 7-1-24 to 6-30-25	Total
Cases reported and application for training received.....	346	46	392
Cases reported but persons refused to apply for training .....	202	66	268
	548	112	660

##### DISPOSITION OF APPLICANTS

	Prior to 6-30-24	Fiscal Year 7-1-24 to 6-30-25	Total
Number cases rehabilitated .....	95	18	113
Number of cases in training.....	.....	27	27
Number cases rejected or closed.....	77	85	162
Number cases surveyed but not in training.....	.....	72	72
Number cases where training has been interrupted.....	.....	8	8
Number applications awaiting survey.....	.....	10	10
	172	220	392



*Cost of Work*

The following financial statement shows the money available for the work and the funds expended during the fiscal year ending June 30, 1925.

Refunds on Federal Funds for artificial appliances and mileage.....	\$ 220.49
Federal Funds available by allotment.....	5,205.96
State Funds available by appropriation.....	13,500.00
Total available .....	<u>\$18,926.45</u>
Federal Funds expended .....	\$ 4,669.20
State Funds expended .....	5,205.26
Total expenditures .....	<u>\$ 9,874.46</u>
Federal Funds returned .....	757.25
State Funds returned .....	8,294.74
	<u>\$18,926.45</u>

## Date Due

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